

GENERAL NOTES

1. ALL MATERIAL AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE WASHINGTON STATE DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD, BRIDGE, AND MUNICIPAL CONSTRUCTION DATED 20__ AND AMENDMENTS.
2. THE SIGN STRUCTURES DESIGN AND ANALYSIS HAS BEEN DONE IN ACCORDANCE WITH AASHTO STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES AND TRAFFIC SIGNALS - FOURTH EDITION - DATED 20__ AND INTERIMS, USING BASIC WIND SPEED OF 90 MPH AND 50 YEARS OF DESIGN LIFE. FATIGUE DESIGN OF THE STRUCTURE CONFORMS TO FATIGUE CATEGORY 1 OF THE SPECIFIED AASHTO STANDARD SPECIFICATIONS.
3. ALL BUTT JOINT WELDS SHALL BE FULL PENETRATION GROOVE WELDS WITH BACK-UP PLATES OF ¼" MIN. THICKNESS.
4. THE BACK-UP PLATES FOR ALL FULL PENETRATION WELDS SHALL BE WELDED CONTINUOUSLY TO THE JOINED PIECES. THIS CAN BE DONE BY EITHER A CONTINUOUS FILLET WELD ON THE BACK SIDE OF THE PIECE, OR BY A CONTINUOUS WELD IN THE ROOT OF THE FULL PENETRATION WELD, UNLESS OTHERWISE NOTED.
5. ALL BOLTS, RODS, AND RELATED HARDWARE SHALL BE GALVANIZED AFTER FABRICATION PER AASHTO M 232.
- α 6. ALL STEEL SURFACES SHALL BE GALVANIZED AFTER FABRICATION IN ACCORDANCE WITH AASHTO M 111. ALL EXTERIOR STEEL SURFACES SHALL BE PAINTED IN ACCORDANCE WITH THE SPECIAL PROVISIONS. THE MAINTENANCE PLATFORM AND ASSOCIATED HAND RAILINGS SHALL NOT BE PAINTED. FOR MAINTENANCE PLATFORM ATTACHMENT BRACKET DETAILS FOR MONOTUBES SEE STANDARD PLAN G-95.20. PAINT ENTIRE ATTACHMENT BRACKET TO MATCH EXISTING STRUCTURE EXCEPT FOR MOUNTING BEAM. MAINTENANCE WALKWAY DETAILS SHALL BE DETERMINED FROM THE CONTRACT PLANS OR THE STANDARD PLANS.
- π 6. ALL STEEL SURFACES SHALL BE GALVANIZED AFTER FABRICATION IN ACCORDANCE WITH AASHTO M 111. ALL EXTERIOR STEEL SURFACES SHALL BE PAINTED IN ACCORDANCE WITH THE SPECIAL PROVISIONS.
7. SIGN PANELS AS SHOWN IN THE CONTRACT PLANS SHALL BE INSTALLED WITH THE SIGN STRUCTURE OR IMMEDIATELY AFTER THE SIGN STRUCTURE IS ERECTED.
- λ 8. FABRICATE BEAM TO PROVIDE SMOOTH PARABOLIC CAMBER CURVE. SEE CAMBER DIAGRAM. DO NOT SHIM AT BOLTED SPLICES.
- β 8. FABRICATE BEAM TO PROVIDE STRAIGHT CAMBER, SEE CAMBER DIAGRAM. DO NOT SHIM AT BOLTED SPLICES.
9. FABRICATE POST STRAIGHT.
10. MATERIALS SPECIFICATIONS:

ALL STRUCTURAL STEEL EXCEPT AS OTHERWISE NOTED

ANCHOR RODS
HANDHOLE COVER SCREWS
SPlice BOLTS
SIGN BRACKET RODS
MOUNTING BEAM BOLTS
COVER PLATES

ASTM A 572 GR. 50 OR
ASTM A 588

ASTM F 1554 GR. 105
ASTM F 593 GR. 1
AASHTO M 164
ASTM A 307
AASHTO M 164
ASTM A 36

11. BOTTOM OF BASE PLATE ELEVATIONS AND POST HEIGHTS SHOWN ARE APPROXIMATE. THE CONTRACTOR SHALL FIELD MEASURE ANCHOR ROD LOCATIONS, ELEVATIONS, CLEARANCES AND ALL STEEL STRUCTURE DIMENSIONS, AND SUBMIT TO ENGINEER FOR APPROVAL PRIOR TO COMPLETION OF FABRICATION. AS AN OPTION, CAP OF ONE FOUNDATION MAYBE PLACED WHILE COMPLETED SIGN BRIDGE IS TEMPORARILY SUPPORTED IN PLACE.
12. POSTS, BASE PLATES, BEAMS AND SPlice PLATES ARE MAIN LOAD CARRYING TENSILE MEMBERS OR TENSION COMPONENTS OF FLEXURAL MEMBERS AND SHALL MEET THE LONGITUDINAL CHARPY V-NOTCH TEST AS DESCRIBED INSECTION 6-03.2 FOR AASHTO M 270 MATERIAL. NON-DESTRUCTIVE TEST ACCEPTANCE CRITERIA TO CONFORM TO TENSILE MEMBERS WITH CYCLIC LOAD.
13. SEE OTHER PLANS FOR CONDUIT PENETRATIONS AND HAND HOLES. REFER TO ELECTRICAL PLANS FOR INTERNAL ROUTING OF CONDUCTORS. CONDUIT CONDUCTORS SHALL NOT BE ATTACHED TO THE OUTSIDE OF THE SIGN STRUCTURE. ISOLATION SWITCH SHALL BE LOCATED NEAR THE SHOULDER OF ROADWAY ON THE OPPOSITE SIDE OF THE BEAM AS THE SIGNS. SEE NEMA 3R TERMINAL CABINET DETAIL ON BRIDGE SHEET _____. (10.1-A1-2, 10.1-A2-2 OR 10.1-A3-2
14. THE MAXIMUM SIGN AREA ON THE STRUCTURE SHALL BE AS NOTED.
- α 15. FOR SIGN AND LIGHT ATTACHMENT BRACKET DETAILS FOR MONOTUBES SEE STANDARD PLAN G-90.20. PAINT ENTIRE ATTACHMENT BRACKET TO MATCH EXISTING STRUCTURE EXCEPT FOR MOUNTING BEAM. SIGN, BEAM LENGTHS, AND SIZE SHALL BE DETERMINED FROM THE STANDARD PLANS. SPACING SHALL BE DETERMINED FROM THE CONTRACT PLANS. VARIABLE MESSAGE SIGNS SHALL HAVE MOUNTING BEAMS @ 3'-0" MAXIMUM.
- π 15. FOR SIGN AND LIGHT ATTACHMENT BRACKET DETAILS FOR MONOTUBES SEE STANDARD PLAN G-90.20. PAINT ENTIRE ATTACHMENT BRACKET TO MATCH EXISTING STRUCTURE EXCEPT FOR MOUNTING BEAM. SIGN, BEAM LENGTHS, AND SIZE SHALL BE DETERMINED FROM THE STANDARD PLANS. SPACING SHALL BE DETERMINED FROM THE CONTRACT PLANS.
- β 16. THE TOTAL BEAM LENGTH "S" SHALL NOT EXCEED 30'-0".
17. ALL WELDING SHALL BE DONE TO MINIMIZE DISTORTION. PERMISSIBLE MONOTUBE DIMENSION VARIATIONS FOR OUTSIDE DIMENSIONS, WALL THICKNESS, LENGTH, STRAIGHTNESS, (PARABOLICALLY CAMBERED SIGN BRIDGE BEAMS EXCLUDED) SQUARENESS OF SIDES AND TWIST SHALL BE IN ACCORDANCE WITH SECTION 11 OF ASTM A500.

note to designer

- π cantilever only
- α balance "t" & sign bridges only
- β balance "t" & cantilevers only
- λ sign bridge only

(modify these notes to fit specific project structure type.)

note to designer

suggested sheet order:

layouts
cantilever
balanced "t"
sign bridge

general notes & other misc. info.

structural details
cantilever
balanced "t"
sign bridge

foundation
cantilever
type 1
type 2 or 3
balanced "t"
type 1
type 2 or 3
sign bridge
type 1
type 2 or 3

barrier shape modification

LEGEND

- B
15

IDENTIFIES SECTION OR VIEW
- TAKEN OR SHOWN ON BRIDGE SHEET 15
- 1
—

IDENTIFIES DETAILS
- TAKEN OR SHOWN ON THE SAME SHEET

Last revised on : 12/4/2012

10.1-AO-1
SR
FILE NO.
JOB
SHEET
1

Bridge Design Engr.				M:\STANDARDS\sign Bridges\GENERAL NOTES.MAN						
Supervisor						REGION NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
Designed By						10	WASH.			
Checked By										
Detailed By										
Bridge Projects Engr.						JOB NUMBER				
Prelim. Plan By										
Architect/Specialist	DATE	REVISION	BY	APPD						

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BRIDGE
AND
STRUCTURES
OFFICE



Washington State
Department of Transportation

STANDARD MONOTUBE
SIGN STRUCTURES

GENERAL NOTES

BRIDGE
SHEET
NO.

SHEET

OF

SHEETS